

Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **63**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **68 C**, Time **40 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **68C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 4 kg (80%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (10%) | 79 % | 22 |
| Grain | Carabody Viking Malt | 0.3 kg (6%) | 76 % | 6 |
| Grain | Dextrin - Crisp | 0.2 kg (4%) | 80 % | 2.8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Citra | 20 g | 60 min | 14.2 % |
| Boil | Citra | 20 g | 30 min | 14.2 % |
| Boil | Citra | 10 g | 15 min | 14.2 % |
| Aroma (end of boil) | Wai-iti | 50 g | 0 min | 2.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------|-------|------|--------|------------|
| W-34/70 | Lager | Dry | 22 g | Saflager |